

Abstract of the Disclosure

A expandable prosthesis having an imageable structure comprising one or more elements visually distinguishable by an external (e.g., radiographic or ultrasonic) imaging system, the structure being
5 located about a first axis that corresponds to a structural feature of the prosthesis that is configured to perform a specific function particular to that axis. The imageable structure is configured to assist in the rotational orientation of the prosthesis during placement within the implantation site. In one embodiment, the prosthesis comprises a venous valve that includes
10 imageable elements or structure, such as a pair of radiopaque markers, that defines the orifice of the valve structure such that the orifice can be oriented with a particular anatomical feature under imaging, such as to align the orifice with the long axis of the vessel. In another embodiment, the imageable structure is configured to permit an aperture located about
15 a stent graft to be oriented with a anatomical feature of the vessel, such as a branch vessel opening. The invention includes a method for using imageable structure to confirm that the orientation of the prosthesis within a delivery apparatus is consistent the desired delivery approach to be used.